

# Useful Hints for Car Workers



Fig. 1. Slowly heating a spark plug until it is red-hot and then letting it cool gradually will remove carbon and won't hurt plug.

**B**OTH the metal body and the insulator of an auto spark plug are built to stand heat, and this fact can be utilized in a novel cleaning method. Grasp the plug by means of a pair of pliers applied to the metallic portion at the top of the insulator and hold it over the flame of a gas stove, as illustrated in Fig. 1, above.

Apply the heat gently at first so as not to crack the insulator and then, after the plug is well warmed, apply the full force of the flame. Get the plug, or at least that portion of the body and insulator that projects into the engine, red-hot and keep it that way for a few minutes. Then set it aside to cool slowly. You will find that the sticky carbon has been reduced to a flaky deposit that can be brushed off.

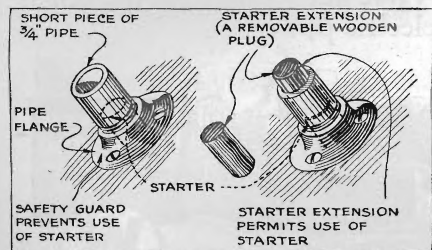


Fig. 2. A pipe flange fitted over starter, with plug to work it, makes car safe for children.

## STARTER SAFETY

THERE always is a possibility of a dangerous accident when children are left alone in the car. One of them may press the starter pedal. To avoid this trouble, purchase a pipe flange for a three-quarter-inch pipe and a long three-quarter-inch pipe nipple. Fasten the pipe flange to the floor boards over the self-starter button as illustrated in Fig. 2, then whittle a round wood plug that will fit in the pipe

*Spark plugs can be cleaned with heat. How to make self-starter safe from children. Screen door spring will increase your heater's efficiency.*

POPULAR SCIENCE MONTHLY awards each month a prize of \$10, in addition to regular space rates, for the best idea sent in for motorists. This month's prize goes to Charles H. Willey, Concord, N. H., (Figure 3). Contributions are requested from auto mechanics.

and project above the edge. When you leave the car, take the plug with you and so prevent the self-starter being used.

## SIMPLE SCREW HOLDER

THERE are many screws about the auto that are so placed that it is extremely difficult to start them in the hole. The simple tool shown in Fig. 3 will make child's play out of such a job. Take a piece of flat iron or brass strip and bend the ends as shown. Slot one end to the diameter of the largest screw and fit two screw eyes by riveting or soldering.

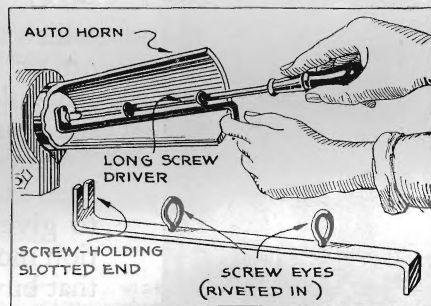


Fig. 3. A slotted piece of flat iron or brass strip serves as a good and simple screw holder.

## PIPE BLOW-OUT VALVE

THE easiest way to clean out small piping is to apply air pressure. Unfortunately, the special head on the end of the air pressure hose can only be operated by

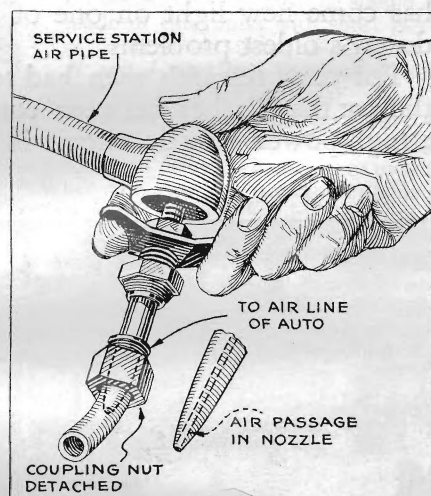


Fig. 5. Valve stem from an old tube, filed down, will fit pipe to be cleaned by air pressure.

pressing against the tire valve. Figure 5 shows a way to overcome this difficulty. Take the valve stem from an old tube, file off the flange that rests against the inside of the tube, and so convert it into a tapered end which will fit into the pipe.

## USES FOR SPRINGS

FIGURE 4 shows how old screen door springs increase heat radiating surface of a hot air type car heater. Wind the spring around the exhaust pipe as shown. Figure 6 shows screen door springs tightly fastened around the drum of a squeaking brake to muffle the squeak by damping the vibration of the drum.

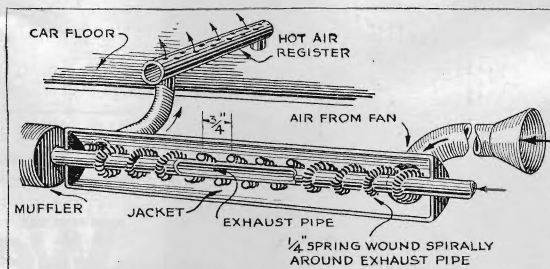


Fig. 4. A spring from an old screen door, wound around exhaust pipe, will increase heat from hot air type heater.

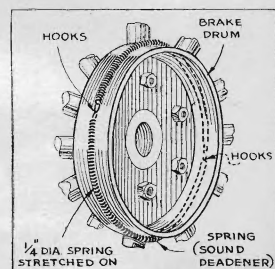


Fig. 6. How squeak in a brake drum can be muffled.